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Constructional semantics on the move: On semantic specialization in the English double object construction*

Timothy Coleman & Bernard De Clerck

Abstract

In this article we tackle the issue of diachronic variation in constructional semantics through an exploration of the (recent) semantic history of the well-established English *ditransitive* or *double object* argument structure construction. Starting from the assumption that schematic syntactic patterns are not fundamentally different from lexical items, we will show that — similar to the diachronic semantic development of lexemes — the semantics of argument structure constructions in general and that of double object constructions in particular, is vulnerable to semasiological shifts as well. More specifically, the analysis, which compares data from 18th-century Late Modern English with present-day English, shows that the double object construction's semantic evolution presents a case of *specialization*, in which the construction has come to be associated with a significantly *narrower* range of meanings. It will further be argued that such patterns of semantic change are best captured in a model of argument structure semantics which discriminates between central and less-central or prototypical and non-prototypical uses.

1. Introduction

This article addresses the issue of diachronic variation in constructional semantics, through an exploration of the (recent) semantic history of the English *ditransitive* or *double object* argument structure construction [Sbj [V Obj₁ Obj₂]] (henceforth: DOC). A basic tenet of construction-based approaches to grammar is that schematic syntactic patterns are meaningful entities in their own right which, by implication, are not fundamentally different from lexical items (or, in construction grammar parlance, from *atomic lexically substantive* constructions). That is, just like lexical items, syntactic constructions are taken to be stored pairings of a certain form with a certain meaning. Hence, a lot of work in the various strands of construction grammar has gone into the elucidation of the semantic properties of grammatical structures; a seminal example is Goldberg's (1995) analysis of the English DOC as a prototypically structured polysemous category with a basic sense 'Agent successfully causes recipient to receive patient' (also see Section 2 below). Until quite recently, however, the large majority of construction-based studies was conducted at the (idealized) level of the synchronic standard language. Indeed, it is only in recent years that intralingual *variation* and *change* in the formal and semantic make-up of constructions has come to the fore as constituting a crucial and fruitful area of investigation in its own right. Relevant work on English includes Wulff, Stefanowitsch and Gries (2007) on the distinct sets of verbs most typically associated with the *into*-causative in British versus American English, Mukherjee and Hoffmann's (2006) study of the wider lexical possibilities of the DOC in Indian English (as compared to Inner Circle varieties), Siewierska & Hollmann (2007) on word order variation in the DOC in varieties of British English, etc., as well as the papers in this special issue. Several of the papers in volumes such as Leino (2008), Bergs and Diewald (2009) and

Geeraerts, Kristiansen and Peirsman (2010) explore similar issues of constructional variation and change in other languages.

However, an aspect of intralingual variation that has not been a major focus of attention so far is the semantic evolution of existing, *well-established* grammatical constructions over time. Existing diachronic studies of argument structure constructions tend to focus on either the *emergence* of schematic patterns — see Israel's (1996) study of the schematization of the *Way*-construction for an early example — or on their *demise*, see e.g. Trousdale (2008) on the end of the impersonal construction in English (a topic which is also discussed in Gisborne, this issue). Such topics are well worthy of linguistic attention, of course, but in addition, it is worthwhile to investigate the semantics of constructions which have been part of the grammar for a long time from a diachronic perspective, in order to keep track of possible shifts in their constructional semantics.¹ After all, to return to the analogy with lexical items, it is well-known that diachronic variation in the *lexicon* is not limited to the creation of new words and the disappearance of others, but also crucially involves patterns of change in the semantic structure of existing words; see, e.g., Geeraerts' (1997) monograph on *Diachronic Prototype Semantics* for many examples of diachronic shifts in lexical semantics. There is no *a priori* reason to suppose that this should be different in the more schematic regions of the constructicon. If one accepts that schematic argument structure constructions are meaningful linguistic entities in their own right just like lexical items are, one can also expect that, on careful examination, constructional meanings will be subject to a certain degree of diachronic variation just as well.

Recent work by Barðdal and colleagues provides an example of this kind of diachronic research in constructional semantics. Barðdal (2007) compares the semantic ranges of the dative-accusative ditransitive construction in Old Norse-Icelandic, Modern Icelandic and conservative Mainland Scandinavian dialects and tries to reconstruct the semantic range of this construction in Proto-Germanic. Barðdal, Kristoffersen and Sveen (to appear) adds present-day standard Faroese and Norwegian to the comparison. Some of the findings from this research will be briefly discussed below.

The present article takes a similar perspective, though it covers a shorter time period and is more explicitly concerned with the similarities between lexical and constructional shifts in meaning. On the basis of data from a corpus of Late Modern British English, we will map the semantic range of the DOC in 18th-century English and compare this to the construction's present-day semantics, in order to examine whether this construction has indeed been subject to semantic shifts over the investigated time period, and, if so, whether these shifts are similar to the patterns of change found in lexical semantics. More specifically, we will investigate the hypothesis that this construction has undergone a process of semantic *specialization*, one of the basic mechanisms of semasiological change identified in lexicology. As such, the present enterprise can be considered an exercise in *diachronic constructional semasiology*.

The article is structured as follows. Section 2 further motivates our choice for the English DOC as the construction under investigation, laying out insights into the semantics of this construction from existing research. Section 3 outlines the methodology of the corpus investigation, while Section 4 presents and discusses a number of interesting trends in the data.

Section 5 is the general discussion section and is followed by a brief note on variation in present-day English in Section 6. Finally, Section 7 wraps up the main conclusions.

2. The semantics of the English double object construction: Earlier observations

The English DOC has been a popular test case for theories of argument structure and the syntax-semantics interface at least since Green's (1974) book length study of the dative alternation, and, unsurprisingly, it also figures prominently in the construction grammar literature. Goldberg's (1995, 2002, 2006) seminal analysis presents the construction as a key example of a highly *polysemous* argument structure construction: the construction's semantic structure consists of a family of related senses built around a central sense 'Agent successfully causes Recipient to receive Patient'. Each of these constructional subsenses is associated with one or more semantic classes of verbs, so that, for instance, double object clauses with verbs of giving instantiate the construction's basic sense while double object clauses with verbs such as *refuse* and *deny* instantiate a subsense which presents the negation of the basic sense, i.e. 'Agent causes Recipient *not* to receive Patient', as illustrated in (1) and (2) below, respectively. For a brief overview of the construction's various subsenses, see Goldberg (1995: 31–39, 2002).

- (1) *Sue gave/passed/handed/sold/... her brother a two-volume dictionary.*
- (2) *The guards refused/denied the convict a last smoke.*

Alternative constructionist analyses of the semantics of the English DOC include Kay (1997, 2005) and Croft (2003), as well as Rappaport Hovav and Levin (2008), the latter of which is not explicitly stated in constructionist terms but is not incompatible with the general approach. Section 5 will briefly look into the merits of Goldberg's versus Kay's analysis in the light of the diachronic data presented and discussed in Section 4.

In addition, there is a series of empirical, corpus-based investigations of the DOC and of its relation to other three-participant constructions, see Stefanowitsch and Gries (2003), Gries (2003) and Mukherjee (2005), among others. Finally, a number of studies have looked into the semantic properties of the DOC in varieties other than standard British and American English: apart from the study of Indian English by Mukherjee & Hoffmann (2006) mentioned above (also see Hoffmann & Mukherjee 2007), relevant work includes Webelhuth & Dannenberg's (2006) analysis of what they dub the *Southern American English double object construction* (i.e., the construction exemplified by *He had him some beers*) and Bresnan and Ford (2010) on semantic and other determinants of the dative alternation in American and Australian varieties of English. In sum, there is an extensive body of research on the semantic properties of the DOC in various present-day varieties of English, which can serve as the background for our diachronic investigation. Our own data on the DOC in 18th-century English will be compared with the construction's present-day semantic range as documented in these existing studies.

Another major motivation for selecting the DOC as the focus of study, is the suggestion arising from earlier studies that this construction has indeed undergone a number of semantic shifts over time. It is well-known that the constructional inventories of Old

English and early Middle English included *several* ditransitive constructions with two NP objects — i.e., with different case marking patterns: dative + accusative, genitive + accusative, dative + genitive, and so on — which together covered a broader semantic domain than the present-day DOC (see, e.g., Allen 1995: 28–29, Visser 1963: 606–635). However, even if we leave these older constructions with overt morphological case marking out of consideration and focus on the evolution of the “modern” DOC with two zero-marked objects after the Middle English period, there are indications that this construction was associated with a somewhat different range of meaning in earlier sub-stages of Modern English than it is today.

Hoffmann & Mukherjee (2007) used a sample of 17th to 19th-century British texts from the online Gutenberg Archive to investigate whether a number of DOC uses which are grammatical in Indian English but not in present-day British English could be cases of superstrate retention (i.e., of older uses from British English which have been preserved in the Indian variety). While the answer to this question is mostly negative, they did find a number of DOC uses in the historical British data which are absent from the present-day grammar (e.g. with verbs such as *address*, *recommend*, *say*, etc., see their Table 2 on p. 16). Other indications are found in Rohdenburg’s (1995) study of a series of grammatical changes involving prepositions in Modern English, which, while not primarily concerned with the DOC per se, observes an interesting trend in the diachronic data. Since the early stages of Modern English, Rohdenburg argues, the DOC has *lost* a number of semantic possibilities, where it has been replaced by more explicit prepositional constructions (1995: 108–113). To be more specific, he notes three groups of uses which have disappeared, viz. (i) DOC clauses with verbs of dispossession such as *bereave*, (ii) DOC clauses with verbs which denote “directive” acts such as *command*, and (iii) DOC clauses with verbs of banishment such as *banish*, *dismiss* or *expel*. Each of these obsolete uses is illustrated with one or with a couple of attested examples from late 16th to early 18th-century texts. By contrast, Rohdenburg has only found two single verbs in his data which seem to have developed an (infrequent) DOC use *after* the 16th century, namely *affix* and *challenge* (1995: 109). In general, he concludes, it seems that the array of verbs compatible with the English DOC has been more and more reduced to verbs of giving and closely related verb classes in the course of the investigated period.² These observations are briefly recapitulated in Rohdenburg (2007: 219–220), where it is also remarked that the semantic history of the DOC constitutes “a vast and complex area of change which has been barely touched upon up to now”.

In the present article, it is our intention to investigate this particular area of semantic change in a more systematic way. If the trend observed by Rohdenburg (1995) is corroborated by the data, this would mean that the DOC has been subject to a process of *semantic specialization* or *narrowing*, one of the four basic mechanisms of semasiological change traditionally identified in lexicological research, next to metaphor, metonymy and generalization (see Geeraerts 2010: 26–27). Semantic specialization is the process by which the meaning of a word becomes less general or less inclusive: “If the semantic range of application of an item is conceived of in set-theoretic terms, specialization implies that the range of application of the new meaning is a subset of the range of the old meaning” (Geeraerts 2010: 26). Textbook examples from English include *meat*, which at one time could refer to any solid food but now only means ‘edible flesh’, and *hound*, which lost its general

meaning ‘dog’ and came to refer to a specific kind of dog used for hunting or racing. If the semantic range of application of the DOC in the present-day language is a subset of its semantic range in earlier substages of Modern English, then this qualifies as an example of specialization in constructional semantics. The next section outlines how we went about in compiling diachronic corpus data for testing this specialization hypothesis.

3. Corpus data and methodology

For its corpus data, our investigation relies on the extended version of the Corpus of Late Modern English texts (CLMET) compiled by Hendrik De Smet, which consists of both fiction and non-fiction prose texts from British authors and is divided in three seventy-year subperiods (1710–1780, 1780–1850, 1850–1920) (see De Smet 2005). As a first step towards the compilation of a representative database of early Late Modern English double object clauses, we queried the first subperiod of this corpus (1710–1780), which contains some three million words of running text. The corpus, however, is not part-of-speech tagged or syntactically annotated, so automatic or semi-automatic retrieval of DOCs on the basis of syntactic queries was not possible. As an alternative, a combined set of lexical queries was launched for all strings of an object pronoun (excluding *it* and *thee*) immediately followed by a definite or indefinite article, a possessive determiner or an indefinite pronoun (i.e., strings of the type *me the*, *her a(n)*, *him my*, *you any*, *them some*, etc.). This search strategy is inspired by the canonical word order of the DOC in which the indirect object NP immediately precedes the direct object NP and by the well-known fact that double object clauses typically combine a pronominal recipient with a lexical NP theme (see, e.g., Collins 1995 for frequency data; also see Gries 2003). Manually filtering the results of these automated queries produced a dataset of 2,205 double object clauses of the kind illustrated in (3), involving 111 different verbs. Appendix A presents a full list of the observed verb types, in alphabetical order.

- (3) a. *My master **sent** me a message just now, that he was so much better, that he would take a turn, after breakfast, in the chariot, and would have me **give** him my company.* (Richardson, 1740)
- b. *Nature did not give it to you for nothing, still less to **cause** you the headache.* (Chesterfield, 1748)

Obviously, this method does not guarantee the retrieval of *all* relevant examples from the queried corpus: double object clauses with a full lexical indirect object NP will not have been retrieved, for instance, nor will double object clauses with non-canonical word order (e.g. with a fronted direct object), with indefinite plural direct objects, etc. However, for the present aim — i.e., a first inventory and reconstruction of the array of semantic verb classes compatible with the DOC in the investigated language stage — the database should suffice, as, together, the 111 observed verb types can be assumed to give a good indication of the construction’s semantic range. In a second phase, a number of interesting verbs from the database were selected for further scrutiny, which involved additional querying for *all* of their attestations in the 18th-century corpus, in order to obtain detailed frequency information (see Section 4). We will now turn to a discussion of the findings.

4. The semantic range of the DOC in 18th-century English: A first inventory

4.1. General observations

The above-mentioned database of 2,205 tokens can be used to determine whether the semantic range of application of the DOC in 18th-century English is qualitatively different from the construction's current range of application (see the end of this section for a brief elaboration on *qualitative* versus *quantitative* semasiological shifts). There are two aspects to this question. First, are there any important uses of the present-day construction which were not present yet in 18th-century English, and second, are there any important uses of the 18th-century construction which have since disappeared from the grammar? If the semantic specialization hypothesis is to be upheld, the answer to the first part of the question should be negative and the answer to the second part of the question should be affirmative.

In answering this question, it is natural to start out from the lexical filling of the DOC's *verb slot* in the 18th-century data, i.e. from the set of 111 verb types listed in Appendix A. Moreover, in comparing the historical data with the present-day situation, we are not primarily interested in changes pertaining to *individual* verbs, but in changes at the level of the *verb class*, i.e. in changes concerning semantically coherent clusters of verbs, the combination of which with DOC syntax represents a constructional subsense in terms of Goldberg (1995), or a verb-class-specific sub-construction in terms of Croft (2003). While the DOC has been looked at from a multitude of theoretical perspectives, there is a consensus that an essential part of speakers' grammatical knowledge of this construction is constituted by a kind of inventory of the *semantic classes of verbs* which can be used in the construction and of the associated semantic nuances. Consequently, the majority of in-depth semantic analyses of the present-day DOC include a more or less fine-grained overview of double object verb classes as a crucial part of the overall analysis, regardless of their exact theoretical orientation, see e.g. Green (1974), Wierzbicka (1988: 359–387), Pinker (1989), Levin (1993), Goldberg (1995, 2002) and Hunston and Francis (2000) for examples of such semantic categorizations. On the basis of this extensive bulk of literature, the left-hand column of Table 1 presents an overview of the semantic classes associated with the DOC in present-day English. For each of these classes, the right-hand column lists a number of representatives in the 18th-century dataset.

Table 1 Present-day DOC verb classes and representatives in the 18th-century data

Verb class	Class members attested in the DOC in the 18 th -century data
Verbs which inherently signify acts of giving	<i>give, lend, pay, sell, return, allot, grant, reach, deliver, assign, remit, ...</i>
Verbs of instantaneous causation of ballistic motion	<i>throw</i>
Verbs of continuous causation of accompanied motion	<i>bring, carry, drag</i>
Verbs of sending	<i>send</i>
Verbs of giving with associated satisfaction conditions/Verbs of future transfer	<i>offer, owe, promise, reserve, assure, ...</i>

Verbs of permission	<i>allow, permit</i>
Verbs of refusal/Verbs of future not having	<i>deny, refuse, save, spare, cost</i>
Verbs of type of communicated message (aka Verbs of telling, teaching, and showing)	<i>tell, ask, teach, show, write, recommend, read, inform, answer, ...</i>
Verbs of instrument of communication	/
Verbs of creation/preparation	<i>make, prepare, fill (a glass), design, ...</i>
Verbs of obtaining	<i>get, buy, fetch, find, leave, obtain, ...</i>
Verbs of performance	<i>sing, play</i>
Verbs concerned with feelings and attitudes	<i>envy, forgive, grudge, intend</i>

Table 1 shows that nearly all of the verb classes associated with the DOC in present-day English were already compatible with the construction in early Late Modern English. The single, but also fairly trivial, example is the class of instrument-of-communication verbs, the examples of which cited in the above studies on present-day English are verbs such as *fax, e-mail, radio, cable*, etc., all of which are, of course, more recent additions to the language, so that their absence from Table 1 is far from surprising.³ In sum, with the exception of the extension towards these novel verbs of instrument of communication — which could just as well be considered as new additions to the ‘send’ and/or ‘tell’ classes — there is no indication that the DOC has been extended to new verb classes after the 18th century. Put in Goldbergian terms, the various constructional subsenses displayed by the DOC in present-day English were already present in 18th-century English.⁴

The next question to be asked is whether the 18th-century data include examples of now-obsolete uses, i.e., verb classes which could be used with the DOC in the investigated period but which are *no longer* or *only marginally* associated with the construction in present-day English. A quick glance at the list of verbs in the Appendix suffices to show that this is indeed the case. Next to many verbs which are still compatible with double object syntax, the database also includes a lot of instances with verbs which are not widely used in the DOC today. However, in this regard, an important distinction needs to be made between two kinds of (near) obsolete uses. First, there are cases where the verb *itself* has changed in meaning or has become obsolete. The double object clause in (4) with the verb *bespeak* is a case in point.

- (4) *I bid him **bespeak** me a remise, and have it ready at the door of the hotel by nine in the morning.* (Sterne, 1767)

In present-day English, *bespeak* is an infrequently attested verb meaning ‘to be evidence of’ (cf. *His accent bespeaks his upper-class background*). The verb has lost the older meaning which is at stake in (4), viz. ‘to order, arrange for’, and, as a result, it can no longer be used in the DOC. Similar examples in the dataset include *reach* and *engage*, the ditransitive uses of which (e.g. *Reach me my pipe, His letter engaged him a favourable reception*) are now obsolete as the verbs have lost the relevant meanings. However, other verbs with similar meanings (*pass, hand, ... ; earn, gain, get, ...*) are still widely used in the DOC.

The attested example in (5) below, by contrast, exemplifies the second subtype of obsolete uses.

- (5) *And a man that could in so little a space, first love me, then hate, then **banish** me his house.* (Richardson, 1740)

In this example, the verb *banish* simply means ‘to officially order someone to leave somewhere’, which is still the basic meaning listed in present-day dictionary entries. In present-day English, however, this verb can no longer be used with double object syntax: rather than as a zero-marked object in a DOC, the place which someone is ordered to leave is now encoded as a prepositional *from*-phrase, i.e. *He banished me from his house* (also see Rohdenburg 1995: 109–113). In other words, the DOC use has been lost even though the verb itself has not changed in meaning. It is of course this latter subtype of obsolete uses that is the more interesting from a construction grammatical point of view — especially if it is not just a single verb but a cluster of semantically related verbs which have lost their DOC uses in this way — as such changes are indicative of shifts in the semantic range of the *construction*. Whereas, at one time, the DOC *could* be used to encode an event in which someone is banished from a place, this is no longer the case in the present-day language.

In section 4.2, five of such semantic shifts will be discussed in somewhat more detail. It is not our intention to provide a thorough semantic analysis of each of these now-obsolete uses here, nor to present a detailed account of their demise. Rather, the aim of the overview is to give an accurate idea of the kind of changes involved.

To conclude this section, it should be emphasized that the present paper is mainly concerned with *qualitative* shifts in the semantic range of the English DOC, i.e. changes in its array of constructional subsenses, in the types of extralinguistic situations the construction can or cannot be used to encode. Needless to say, there might very well be fluctuations in the position these subsenses occupy on the central-peripheral axis: a subsense which is quite central to the meaning of a given argument structure construction at a given stage of the language may well occupy a more peripheral position in that construction’s semantic network at a later stage, or vice versa. In other words, a full account should also take stock of more subtle shifts in the structural weight or relative degree of salience of the various attested uses. On the basis of a more *quantitative* analysis of frequency data one could examine which uses/subsenses of the DOC can be considered central or salient to the construction’s meaning at a given time and which cannot (see Grondelaers, Speelman and Geeraerts 2007 for a brief overview of qualitative versus quantitative aspects of semantic structure). Section 4.2.4 will briefly discuss an example of a constructional subsense of the DOC which seems to have been more frequent in earlier language phases than it is today, but we leave it to a future study to explore such quantitative issues in a more systematic way.

4.2. A closer look on five groups of obsolete (or marginalized) uses

4.2.1. *Verbs of banishment.* Several of the verbs listed in Appendix A denote events of ‘banishment’. In this way, our data corroborate Rohdenburg (1995) who also quotes a number of DOC clauses with banishment verbs from 18th-century texts (cf. Section 2). In addition to *banish* itself, other class members which are attested in the DOC in the first period of the

CLMET include *dismiss*, *discharge*, and *expel*, see the examples in (6a) to (6c). *Forbid*, as used in (6d), can also be included in this category.⁵ In all of these cases, the direct object refers to the place which the indirect object referent is ordered to leave from or forbidden to enter (or, metonymically, to an occupation associated with that place). None of these verbs can be used in the DOC in present-day English (with the exception of a number of infrequent fossilized uses, see Section 6).

- (6) a. *I will put it entirely into your power to **discharge** her the house, if you think proper.* (Richardson, 1740)
 b. *I therefore for the present **dismiss'd** him the Quarter deck.* (Cook, 1771)
 c. *From some hints in the two letters, I should expect that the eunuchs were not **expelled** the palace without some degree of gentle violence.* (Gibbon, 1776)
 d. *[He] therefore **forbade** her the court.* (Walpole, 1744)

4.2.2. “Pure benefaction”. Many languages have a ditransitive construction which next to acts of giving etc. can also encode events involving a *beneficiary* rather than a prototypical *recipient*. Polish is a case in point, as illustrated in the examples from Dąbrowska (1997: 25–35) in (7) below. In this language, the construction with dative and accusative objects can be used to encode prototypical transfer of possession events (7a) as well as events in which somebody carries out an action for the benefit of somebody else (7b–d), with the dative object coding the recipient and the beneficiary, respectively (see Shibatani 1996, Newman 1996: 95–97 and Kittilä 2005 for similar examples from other languages).

- (7) a. *Dał / Ofiarował jej obraz.*
 he gave/ he presented her:DAT picture:ACC
 ‘He gave her a picture./He presented her with a picture.’
 b. *Ala uszyła mi sukienkę.*
 Ala:NOM sewed me:DAT dress:ACC
 ‘Ala sewed me a dress.’
 c. *Magda kupiła Wojtkowi książkę.*
 Magda:NOM bought Wojtek:DAT book:ACC
 ‘Magda bought Wojtek a book.’
 d. *Krystyna otworzyła Oli drzwi.*
 Krystyna:NOM opened Ola:DAT door:ACC
 ‘Krystyna opened the door for Ola.’

The present-day English DOC can be used to encode benefactive events as well, but such uses are subject to an important ‘intended reception’ constraint. Several authors have pointed out that for the DOC to be possible in English, the beneficiary has to be involved as the intended recipient of the patient, so that there is a marked difference in acceptability between the clauses in (8a), which denote situations aimed at the transfer of the patient to the beneficiary, and (8b), where the beneficiary *cannot* be construed as an intended recipient (see, e.g., Allerton 1978, Wierzbicka 1988: 367–370, Langacker 1991: 360, Coleman 2010a, 2010b). In

terms of Kittilä's (2005) distinction between several subtypes of benefactive events, the present-day English DOC — unlike, for instance, the Polish construction in (7) — only accommodates events of “recipient-benefaction”, i.e., events in which the nature of benefaction is such that the beneficiary ultimately receives something by instigation of the agent. Events of so-called “pure benefaction”, i.e. which do not involve a subsequent transfer of possession, are ruled out.

- (8) a. *She bought me a book, She sewed me a dress, She found me a job, ...*
 b. *?* She opened me the door, * She watered me the plants, * She cleaned me the windows, ...*

Put differently, the benefactive use of the DOC is largely restricted to acts of creation/preparation or obtainment in present-day English, denoted by verbs such as *make, bake, build, cook, get, buy, find*, etc. In Goldberg's (1995) analysis of the DOC's constructional semantics, these verb classes are associated with subsense F: ‘Agent intends to cause Recipient to receive Patient’.

In 18th-century English, by contrast, the lexical and semantic possibilities were wider. The database contains several DOC examples in which the beneficiary is *not* involved as the intended recipient of an object which is created or obtained for his/her sake. A number of relevant examples are listed in (9).

- (9) a. *... so snatching out his pocket-book, and the young Benedictine **holding** him the torch as he wrote, he set it down as a new prop to his system of Christian names.* (Sterne, 1767)
 b. *And yet I work all hours with my needle, upon his linen, and the fine linen of the family; and am, besides, about **flowering** him a waistcoat.* (Richardson, 1740)
 c. *A new fragment of Dion shows some shrewdness in the character of Julian. When the senate **voted** him a golden statue, he preferred one of brass, as more lasting.* (Gibbon, 1776)

(9a) presents the best example of pure benefaction. Clearly, there is no intended reception involved here: rather, the young Benedictine is holding the torch for the beneficiary so that the latter does not have to hold it himself (and can write something down instead). In Kittilä (2005), this subtype of pure benefaction is labelled *substitutive* benefaction. (9b) and (9c) do not involve substitutive benefaction, but neither do they qualify as straightforward examples of recipient-benefaction. The sense of the verb *flower* involved in (9b) is ‘to embellish with figures of flowers or a floral design’, so that the subject's action is not aimed at a subsequent transfer of possession in the strict sense of the word. The direct object referent was already in the possession of the indirect object referent *before* the denoted event and the benefit consists in this item being changed for the better — in this case being made into a more exquisite waistcoat.⁶ In (9c), the exact nature of the benefaction is hard to define, but, clearly, Julian is not involved as the intended recipient of a statue; rather, he is the intended honoree of the yet-

to-be-erected statue. In any case, the denoted events are hardly eligible for the DOC in the present-day language.

Interestingly, similar examples are fairly easy to come by in later texts as well. The 19th-century examples in (10), for instance, both of which are from British texts, are relevantly similar to (9a) above in that they denote events of substitutive benefaction.

- (10) a. *He would expect his wife to hand him to the coach, to **open** him the door, to reach him a chair.* (*The Sporting Magazine*, January 1819, p. 164; retrieved via <http://books.google.com>)
- b. *Let a French woman nurse me when I am ill, let an English woman **clean** me my house, and an Englishman **write** me my poetry!* (Jean Ingelow, *Don John*, London, 1881, p. 176; retrieved via <http://en.calameo.com/read/00010704403432a905809>)

All of this suggests that the ‘intended reception’ constraint on the use of the benefactive DOC is a fairly recent phenomenon. To be sure, there is a lot of regional and individual variation in this regard in present-day English as well, in that the constraint is less strictly adhered to by some speakers than by others (see the brief discussion in Section 6 and the references cited there). However, although the details of this contrast will have to be further investigated in future research, our data suggest that the benefactive DOC was less constrained in 18th-century English than it is in standard varieties of present-day English.

In addition, the data also show instances of a related obsolete use, namely the use of the DOC to denote *malefactive* events. According to Visser (1963: 626), the indirect object in older language stages often denoted “a person to whose advantage or disadvantage an action is performed”. Some of the examples he cites indeed denote events in which the indirect object referent is *disadvantaged* by the action, e.g. *þe deofol him scorteð his dazes* ‘The devil shortened him his days’ (Lambert Homilies, 1175) and *Then shall I false her my promise* (Lord Berners, *Huon of Burdeux*, ca. 1540). In our 18th-century data, this malefactive use of the DOC is represented by two examples with *spoil*, one of which is presented in (11) below. Such examples again illustrate the wider range of possibilities in Late Modern English.

- (11) *... but a mischievous mob of colliers ... attacked us in the street ... and **spoiled** me a complete set of blond lace triple ruffles, not a pin the worse for the ware.* (Smollett, 1751)

4.2.3. *Communication verbs.* A well-known observation about the semantic range of the DOC in present-day English is that it welcomes so-called “verbs of type of communicated message” (e.g. *tell, ask, read, quote, ...*) but that it excludes other subtypes of communication verbs, most notably “verbs of manner of speaking” such as *shout, whisper, mumble*, etc.; see the reported ungrammaticality of the examples in (12) in Pinker (1989: 112) (also see Levin 1993: 47, Goldberg 1995: 121, etc.).

- (12) * *John shouted/screamed/murmured/whispered/shrieked/yodeled/yelled/bellowed/grunted/barked Bill the news.*

Further observations on this generalization are presented in Stefanowitsch (2006). He argues that while it is the case that very large corpora will often turn up a couple of counterexamples for “famously non-ditransitive verbs”, their sporadic occurrence in the DOC need not necessarily invalidate the corresponding semantic generalizations, as long as such counterexamples are sufficiently rare. The manner of speaking verb *whisper* is a case in point: while a few examples of *whisper* with double object syntax can be found on the Internet (see 13 below, for instance), this structural pattern is, very relevantly, *not* attested in the 100-million-word British National Corpus (on a total of 2,976 *whisper* clauses) (see Stefanowitsch 2006: 69).

- (13) *She had not been allowed ... to bury the two people she had loved most in the world ... to **whisper** them a last goodbye.* (Meg Hutchinson, *Peppercorn Woman*, quoted in Stefanowitsch 2006: 70)

Hence, the generalization that the DOC does not readily welcome verbs of manner of speaking is still valid, though it should be rephrased as a strong statistical tendency rather than an absolute constraint. Occasional “counterexamples” such as (13) are probably best thought of as ad-hoc creations via analogy with more conventional patterns such as *to give/bid/tell s.o. a last goodbye*: in any event, DOC *whisper* can hardly be considered a well-entrenched pattern in the present-day language.

Again, this was different in 18th-century English. The original database included the example in (14a), and an additional query for *all* forms of *whisper* in the first period of CLMET revealed 13 more double object examples, including instances with a complement clause rather than a NP direct object such as (14b) and (14c), on a total of 72 *whisper* clauses.

- (14) a. *At her departure she took occasion to **whisper** me her opinion of the widow, whom she called a pretty idiot.* (Fielding, 1751)
 b. *During this debate, the Duke took occasion to **whisper** the King, that his Majesty had a villain of a chancellor.* (Cibber, 1753)
 c. *I would grant neither, as something **whispers** me that it would be giving a sanction to adultery.* (Goldsmith, 1766)

In other words, the data show that the DOC use of *whisper* was quite well-established in this earlier stage of Modern English. Just like the ‘intended reception’ constraint on the use of the benefactive DOC discussed in the previous subsection, the constraint banning verbs of manner of speaking from the DOC seems to postdate the 18th century.

Some other instances of now-obsolete DOC uses involving communication verbs are listed in (15). They further underscore the fact that the DOC could be used to encode a wider variety of communication events in earlier stages of Modern English. Rohdenburg’s (1995:

108) *command* example (*My Master commanded me silence*, 1726) arguably also belongs in this category.

- (15) a. *[She made enquiries] among all those who she could imagine were able to **inform** her any thing concerning him.* (Haywood, 1744)
- b. *I wish, my dear, you understood Latin, that I might **repeat** you a sentence in which the rage of a tigress that hath lost her young is described.* (Fielding, 1751)
- c. *I will **state** you a case in your own department. Suppose you are employed at a foreign court, and that the minister of that court is absurd or impertinent enough to ask you what your instructions are? will you tell him a lie, which as soon as found out must destroy your credit, blast your character, and render you useless there?* (Chesterfield, 1749)

4.2.4. *Verbs concerned with feelings and attitudes.* In this section we focus on the verbs *envy* and *forgive*, which are subsumed under the label “verbs concerned with feelings and attitudes” in Hunston and Francis (2000: 88–89), together with their (even more) infrequent near-synonyms *excuse* and (not) *begrudge*. As a first observation, it should be stressed that, unlike the verbs discussed in the previous subsections, *envy* and *forgive* are still compatible with the DOC today, as illustrated in the present-day BNC examples in (16).

- (16) a. *She’d always **envied** Mandy her wonderful looks and her voluptuous compact figure.* [BNC–JY6289]
- b. *Jozef is a friend and one **forgives** a friend many things.* [BNC–G15634]

Goldberg, however, expects that these patterns are likely to disappear from the language over time, since they diverge from the DOC’s posited ‘caused reception’ semantics:

[I]t seems reasonable that syntactic change should tend toward patterns that are more transparent to the speaker. If the construction with the semantics outlined here [i.e., the DOC with its polysemous ‘caused reception’ semantics, TC & BDC] is psychologically real, then it would be natural for odd cases of ditransitives involving *forgive* and *envy* to drop out of use. (Goldberg 1995: 132)

Mainly driven by this comment, we had a closer look at these DOC uses in Coleman and De Clerck (2008). In this paper, we argue that it is not entirely impossible to establish semantic links between ditransitive *envy* and *forgive* and the construction’s core ‘caused reception’ meaning, via a combination of semantic extensions. We also show, however, that these uses are on the decline in terms of frequency. A comparison of the use of *envy* and *forgive* in the imaginative writing component of the present-day BNC with the three subperiods of CLMET revealed a consistent and statistically significant drop in their DOC frequencies.⁷ That is, while the DOC uses of *envy* and *forgive* have not as yet disappeared from the grammar, there is statistical evidence that these patterns are gradually giving way to other uses, such as

envy/forgive NP[h] *for* NP, *envy/forgive* <someone's> NP, etc. In sum, we seem to be dealing with an instance of change-in-progress here, in a direction consistent with Goldberg's expectation in the above quote. It is of course very well possible that an equally detailed quantitative investigation of selected other (classes of) verbs from the dataset will reveal a number of similar cases of verbs which, though still compatible with the DOC, are less frequently used in this construction in present-day English than was the case in earlier language stages (see our comments on qualitative versus quantitative diachronic shifts at the end of Section 4.1).

For a semantic shift of a somewhat different kind, consider the examples in (17) with the verb *intend*, which might also be considered a verb concerned with feelings and attitudes, albeit of a different subtype than *envy* and *forgive*.

- (17) a. *And I did not in haste **intend** you the mortification of being undeceived.*
(Richardson, 1740)
- b. *... but when you return thither, after the visit you **intend** me the honor of, I do not propose your having any master at all.* (Chesterfield, 1751)

Intend still occurs with double object syntax, but it is now restricted to a number of lexicalized phrases, mainly *to intend s.o. good or harm*. Clearly, the direct object NP could be drawn from a much larger set in 18th-century English. This is another possible outcome of semantic reduction, i.e., a DOC use being retained in a small set of lexicalized collocations only. Again, a detailed investigation of the lexical material filling the construction's object slots in the 18th-century data, may very well reveal additional examples.

4.2.5. *Verbs of dispossession.* The final semantic class to be discussed here are the verbs of dispossession, one of the examples of obsolete DOC uses mentioned in Rohdenburg (1995). He gives a single example, involving the verb *bereave* and dating from the late 16th century:

- (18) *... she gave him such a nip by the heart, as did altogether **bereave** him his night's rest with the bruise thereof.* (Gascoigne, 1575, cited in Rohdenburg 1995: 108)

A small number of similar examples from later centuries can be found in the example sections in Visser (1963) and the OED, as shown in (19).

- (19) a. *Ceres nor Joue, nor all the Gods aboue, Shall **rob** me this rich purchase.*
(Heywood, 1613: I, cited in Visser 1963: 635)
- b. *My child!.. Even in thy early infancy **Deprived** my care.* (West, 1814: 141, cited in Visser 1963: 634)
- c. *All joy was **bereft** me the day that you left me.* (Scott, 1806, cited in OED, sub *bereave*)

However, such examples with agentive verbs of dispossession are relevantly absent from our dataset of 18th-century double object clauses, with the exception of a single example of the fixed expression *to bate s.o. an ace*, in which *bate* does not denote an act of dispossession

(see OED, *ace* 3b).⁸ Additional searches for all instances of the three frequent verbs of dispossession in (19) in CLMET1 did not yield any instances either, while many instances of the more modern prepositional construction *to rob/deprive/bereave* NP[h] *of* NP did occur (41, 174, and 18 instances, respectively). These data suggest that — unlike the other uses we discussed — double object uses with verbs of dispossession must already have been quite rare at the very beginning of Late Modern English.⁹ Put differently, the demise of this particular group of uses represents a semantic change which was virtually completed even before the period focused upon in the present paper.

5. General discussion: implications for the constructional semantics

5.1. On specialization, deflection, and productivity

The data analysis of the previous section has shown that — with the possible exception of the verbs of instrument of communication — the DOC has not been extended to new verb classes after the 18th century. By contrast, at least three groups of uses have become obsolete since the investigated period, namely the use of the construction with banishment verbs, the use of the construction to encode benefactive events in which there is no ‘intended reception’ and the use of the construction with communication verbs other than verbs of type of communicated message. In addition, we have discussed an instance of change-in-progress, namely the double object uses of *envy* and *forgive*, which have not as yet disappeared but which are on the decline in terms of frequency, as well as an instance of a process of semantic change which was virtually completed *before* the investigated period, namely the demise of the use of the DOC to encode agentive acts of dispossession. In sum, there is enough evidence to conclude that the DOC has indeed undergone a semantic specialization process over the last three to four centuries: in comparison with the early stages of Late Modern English, the construction is now associated with a *narrower* range of meaning. In addition, there is some evidence that this specialization process was already well under way *before* Late Modern English (cf. the dispossession uses) and that it is still ongoing today (cf. *envy/forgive*).

As for the *triggers* for this cluster of semantic changes, it is of course plausible to associate the observed semantic narrowing process and the associated rise of constructions with prepositional objects with the absence of explicit semantic role marking in the double object construction from (late) Middle English onwards. While the present paper is not the place to elaborate on such contrastive issues, it can be observed that in related languages which have preserved a full-fledged morphological case system, constructions with two case-marked nominal objects typically cover a wider region in functional-semantic space than the DOC of present-day English, even if we limit ourselves to the canonical dative + accusative constructions. In those Indo-European languages which have preserved a full-fledged dative case, the schematic meaning of the dative is typically analysed in terms of indirect affectedness — see e.g. Dąbrowska’s (1997: 68) characterization of the dative nominal in Polish as referring to “an individual affected by a process or state which obtains in some part of his personal sphere”. While ‘recipient in a transfer of possession’ is a highly salient subsense in the dative’s semantic network, it is by no means the only one (also see Newman 1996: 82–88 and the references there). At the beginning of the Modern English period, the

indirect object of the DOC could still refer to different kinds of “indirect affectees” as well, but, in the absence of overt morphological clues to the semantic functions of both object nominals, this has been largely reduced to a salient subset of the former semantic range, namely ‘recipient’ and (to a lesser extent) ‘addressee’ meanings. The result is a semantically more transparent pattern (cf. the Goldberg quote in Section 4.2.4). As such, the observed specialization of meaning can be considered a long-term effect of deflection.

This account is corroborated by data from other languages. According to the analysis in Barðdal, Kristoffersen & Sveen (to appear), the constructions with dative and accusative objects in Modern Icelandic and Faroese have a somewhat wider semantic range than the zero-marked double object construction of present-day Norwegian. Focussing on benefactives, Coleman (2010b) shows that in Dutch, which, like English and the Mainland Scandinavian languages, has lost its morphological case distinctions, the semantic range of the DOC has been subject to important semantic narrowing as well. In sum, while the exact degree of cross-linguistic parallelism is a topic that deserves further investigation, the semantic narrowing observed in the English DOC is at least partly mirrored in similar constructions from other languages.

It should be emphasized, however, that we do not want to suggest that diachronic shifts in argument structure semantics can *only* be triggered by more general processes of language change such as deflection. To give an example, Barðdal (2007) notes that in Modern Icelandic, too, the dative-accusative ditransitive construction has lost some possibilities compared to Old Norse-Icelandic: more specifically, benefactive uses involving verbs of creation and obtaining are only attested with reflexive indirect objects now, while there was no such restriction in Old Norse. Whatever the reasons behind this change, it cannot be attributed to deflection.¹⁰

To conclude this section, a brief note on syntactic productivity should be included as well. Bybee (1995) and Barðdal (2008), among others, have convincingly shown that productivity is a function of both *type frequency* and *semantic coherence*. While the English DOC has declined in type frequency, it has simultaneously increased its semantic coherence. In this way, the construction has not only ensured its survival for a long time — note that it has been co-existing with the more explicit *to*-dative and *for*-dative constructions for centuries now — but also its *extensibility* to new verbs, provided these fit in the semantic classes conventionally associated with the construction.¹¹ Thus, our semantic specialization account is not incompatible at all with the well-known ability of the DOC to attract novel instrument-of-communication verbs such as *e-mail*, *text*, and even *blackberry* or *skype*, for instance (see, e.g., Pinker 1989: 113; also see De Clerck et al. to appear for additional discussion and references). The relatively recent double object uses of ‘giving’ verbs such as *feed* and *issue* in (mainly) American English reported in Rohdenburg (2009) provide another example.

5.2. On constructional polysemy

The observed semantic shifts can also be construed as evidence for a *polysemous* view of argument structure semantics, as opposed to monosemous views, presented in Kay (1997, 2005), for instance. In reply to Goldberg (1995), Kay (1997) does not characterize the DOC as a polysemous category with a prototypical ‘caused reception’ sense and various additional

subsenses, but rather as a monosemous construction with an abstract ‘recipient’ sense (or, to be more exact, as *two* monosemous constructions, for he posits a different construction with an abstract ‘beneficiary’ sense to account for DOCs with *buy, bake, make*, etc.).¹² The subtle differences in meaning between DOC examples with different verbs are due to the modulation of this abstract ‘recipient’ sense by the lexical semantics of the instantiating verbs. On this account, there is no need to posit an additional constructional subsense ‘Agent enables recipient to receive patient’ for *He allowed us a break*, for instance, as the relevant meaning can be reduced to the combination of *allow*’s lexical semantics with the construction’s abstract ‘recipient’ meaning. While this is an intuitively appealing alternative, its major drawback — especially in view of the data presented in this article — is that it seems to imply that the various instantiations of the construction are all of equal footing. In this view, language users just need to know whether or not a given verb can instantiate the abstract construction, without the need for further discrimination in terms of prototypicality or salience. For speakers of 18th-century English, for instance, *give, hand, promise, offer, leave, banish, forbid, spoil, whisper*, and *envy* would simply have qualified as ten examples of verbs which were compatible with the abstract semantics of the DOC construction.

However, if we consider which of the above verbs have *lost* this possibility (or are in the process of doing so) and which, by contrast, are still widely used with double object syntax today, it is hard not to acknowledge an overall pattern in which the uses that have disappeared were arguably situated in the *periphery* of the construction’s semantic network even in the 18th century. For *envy/forgive*, for instance, it is argued in Coleman and De Clerck (2008) that a combination of extensions along various dimensions of meaning is needed to link these uses to the construction’s present-day core meaning of ‘successfully caused reception’.¹³ Even if the raw frequencies reported in Appendix A cannot be interpreted without caution, because of the nature of the data extraction method, they clearly illustrate that ‘successfully caused reception’ was the most salient subsense in 18th-century English, too: the *give* verb itself accounts for 41% of the attested DOC tokens (906 out of 2,205). It is admittedly difficult, of course, to provide solid measures of semantic distance, but at the same time it is uncontroversial to assume that, say, ‘banishment’ or ‘dispossession’ meanings are quite divergent from this semantic ‘give’ core. In a polysemous account of constructional semantics which distinguishes between central and less-central uses, it is possible to argue that the further a particular use is removed from a construction’s core meaning, the more vulnerable it is to processes of semantic change. Again, this ties in with what is known about *lexical* change: Grondelaers, Speelman and Geeraerts (1997: 991) observe that in the development of prototypically structured lexical categories, it is often the case that there are peripheral meanings that do not survive for very long next to more important meanings that subsist through time (see Geeraerts 1997: 47–68 for more elaborate discussion and examples).

We do not want to rule out the possibility that these phenomena could be accounted for in a modified version of Kay’s analysis which does not necessarily embrace Goldberg’s model of constructional polysemy to the full extent. However, at the very least, the analysis should be complemented with information about the relative prototypicality and/or salience of the various uses.¹⁴ At present, Goldberg’s model seems to be best equipped for handling

diachronic data of the kind discussed in this paper. Before we move on to the conclusions, Section 6 presents a brief note on synchronic variation in present-day English.

6. A note on present-day variation

The discussion in the previous sections has abstracted away from issues of synchronic variation, but we do not want to suggest that the semantic range of the DOC is uniform across all regional, generational, stylistic, etc. varieties of *present-day* English. For instance, there is a lot of regional and individual variation in the range of acceptability of benefactive DOCs, as shown by, e.g., the occurrence of “derring-do” benefactives of the kind illustrated in (20) in colloquial American English, where the subject performs a courageous act in order to please or impress the indirect object referent (see Takami 2003; also see Goldberg 1995: 150–151 on *Slay me a dragon*, etc.).

- (20) *All you have to do to gain my confidence is **rob** me a couple of banks.* (example from Oehrle 1976: 111)

Obviously, such uses violate the ‘intended reception’ constraint discussed in Section 4.4.2. The same applies to *Open me t' door*, which is perfectly grammatical in Yorkshire English according to Petyt (1985: 236). This intralingual variation in the benefactive DOC is discussed in somewhat more detail in Coleman (2010a).

In addition, there are indications of stylistic variation as well. According to Rohdenburg (2009: 202), certain (fossilized) ‘banishment’ uses still occur sporadically in formal style in British English, as in *He was dismissed her Majesty's service*. These and other examples, however, need not invalidate the observations made, but, in fact, illustrate that some of the wider semantic possibilities of earlier language stages have been partly preserved in specific (more conservative) present-day varieties or genres.

7. Conclusion

Our comparison of the DOC's semantic range of application in 18th-century versus present-day English corroborates that the semantics of argument structure constructions is vulnerable to semasiological shifts, and, as a consequence, provides additional justification for the basic Construction Grammar tenet that the semantic properties of schematic grammatical constructions are not fundamentally different from those of lexemes. More specifically, the DOC's semantic evolution has been argued to present a case of *specialization*, one of the four basic mechanisms of semasiological change posited in traditional lexicology. Since the onset of Late Modern English, the construction has come to be associated with a significantly *narrower* range of meanings. We have also argued that such patterns of semantic change are best captured in a model of argument structure semantics which discriminates between central and less-central or prototypical and non-prototypical uses. We leave it to future work to investigate the *quantitative* aspects of the observed semantic shifts in a more systematic way.

Appendix A: List of verbs attested in the DOC in the 18th-century dataset

acquire (2), advance (1), afford (41), allot (2), allow (28), answer (5), appoint (1), ask (21), assign (4), assure (1), avail (1), banish (1), bate (1), bear (3), begrudge (1), bespeak (1), bring (58), buy (5), carry (4), cast (1), cause (1), cost (20), count (2), deliver (8), deny (10), design (3), direct (1), discharge (1), dismiss (2), do (65), drag (1), dress (1), drop (1), enclose (1), engage (1), envy (5), fetch (6), fill (4), find (1), flower (1), forbid (9), forgive (6), frank (1), gain (7), get (22), give (906), give to know (1), grant (21), grudge (4), hit (5), hold (3), inclose (1), inform (1), insure (2), intend (3), lead (4), leave (19), lend (17), let (1), lose (1), make (106), mean (1), obtain (2), offer (46), order (7), owe (2), pardon (1), pay (48), permit (1), play (2), prepare (2), present (1), procure (39), produce (3), promise (12), provide (6), raise (3), reach (5), read (7), recommend (2), refuse (7), remit (2), render (4), renounce (1), repay (1), repeat (4), reserve (1), return (14), riddle (1), save (8), secure (6), seek (1), sell (7), send (110), set (3), show (121), sing (3), spare (6), spoil (2), state (1), teach (27), tell (176), throw (2), tip (1), transcribe (1), vote (1), vouchsafe (2), whisper (1), wish (19), write (20), yield (4)

Notes

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1. In practice the distinction is not always clear-cut. For instance, Trousdale’s (2008) analysis of the demise of the impersonal construction also documents how the various semantic functions of this construction have been taken over by the transitive construction. In this respect, the study *does* address the semantic evolution of a well-established construction.

2. Rohdenburg (1995: 108): “Im Mittelenglischen und Frühneuenglischen gab es noch eine große Vielfalt von Konstruktionen, bei denen zwei präpositionslose Objekte miteinander verbunden sind. Solche Doppelobjekt Konstruktionen sind jedoch im Laufe der Zeit mehr und mehr auf Verben beschränkt worden, die Vorgänge der Besitzübertragung und Verwandtes bezeichnen [In Middle English and Early Modern English, there was still a multitude of constructions in which two preposition-less objects are conjoined. In the course of time, such double object constructions have been increasingly reduced to verbs which denote events of possessional transfer and the like].”

3. It can be noted, in passing, that Late Modern English did have verbs of instrument of communication, such as *pigeon*, for which the OED lists an obsolete and rarely attested sense ‘to send (a message) by carrier pigeon’ and *post*, for which an equally obsolete sense ‘to send by special messenger’ is listed. However, the entire CLMET-EV does not contain a single instance of these meanings of *pigeon* or *post*, so that it cannot be established whether these verbs could be used in the DOC.

4. This does not rule out the possibility that *within* the above classes, a number of new verbs can be attracted. Rohdenburg (2009) reports on the relatively recent double object uses of *feed* and *issue*, which indeed do not occur in the historical data. Both verbs are newcomers, but they do not constitute a new class; rather, they can be labeled as new members of the ‘give’ category. The reverse pattern is also observed: note that the list of 18th-century examples of the ‘give’ class in Table 1 includes *deliver*, which is often quoted as an example of a verb of giving which is *not* compatible with the DOC in Present-day English (because of the so-called *Latinate Restriction*, see e.g. Pinker 1989 and see De Clerck & Colleman 2009 for further discussion).

5. (6a), (6b) and (6d) are examples from the original database, (6c) was found via an additional query for all instances of the verb *xpel* in CLMET1.

6. However, as pointed out by one of the editors, an act of embellishment or decoration is also an act of creation, in a sense: if Richardson's Pamela is embroidering silk flowers on her master's waistcoat, she is also creating part of the waistcoat. Indeed, while Mr. B does not, strictly speaking, receive a new waistcoat as a result of the action, he does receive an *embroidered* waistcoat, so that, unlike in (9a) and (9c), there may be a tinge of 'intended reception' here. This is indicative of the inherent fuzziness of the intended reception constraint, which is discussed in more detail in Coleman (2010a, 2010b).
7. In case of *envy*, the normalized frequency of the DOC use decreases from 6.2 instances per million words in the first CLMET subperiod to 2.0 instances per million words in the BNC, in case of *forgive* there is a decrease from 6.7 to 2.2 instances per million words. We also observed a mild but statistically significant decrease in the proportion of DOC to other uses: the percentage of DOC uses drops from 27.1 % to 17.6% for *envy*, and from 8.7% to 4.6% for *forgive*; we refer to Coleman & De Clerck (2008: 195–196) for statistical details.
8. The qualification that there are no *agentive* dispossession verbs represented in the database is needed because there is of course *cost*, which is still frequently used in the DOC today, as in *That mistake might cost me my reputation*, which denotes a situation in which somebody *loses* rather than *receives* something as well, but not by instigation of a volitional agent; see Coleman and De Clerck 2009 for further discussion.
9. There are no instances of dispossession verbs in Hoffmann & Mukherjee's (2007: 16) list of obsolete DOC uses attested in their 17th-to-19th century data either.
10. Barðdal herself does not seem to consider this a *semantic* shift, for she concludes that while the use of the ditransitive has become grammatically more restricted in Icelandic, its lexical and semantic scope has been maintained (1997: 21). Fair enough, this is a less spectacular change than the English phenomena discussed in section 4.2. Still, it implies that the present-day Icelandic ditransitive can encode a narrower range of benefactive events than its Old Norse equivalent, which, in our view, is also a semantic evolution.
11. We would like to thank an anonymous reviewer for urging us on to make this point.
12. This analysis is slightly modified in Kay (2005), where he introduces a further distinction between a monosemous *Direct Recipient* construction (found with *give*, *hand*, *sell*, etc.) and a monosemous *Modal Recipient* construction (found with *promise*, *offer*, *allow*, *refuse*, etc.), but this analysis seems to be subject to the same criticism.
13. Coleman and De Clerck (2008, 2009) rely on the *multidimensional* approach to constructional polysemy advocated in Geeraerts (1998), which posits several dimensions of semantic variation in constructional networks.
14. The same applies to the analysis in terms of *verb-class-specific* and *verb-specific* constructions in Croft (2003), which could, in our view, quite easily be complemented with information about the relative degree of centrality of the various subconstructions.

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